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09/208,814	12/09/1998	R. PADMANABHA RAO	939V-310-1-1	8650

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EXAMINER

HUYNH, SON P

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/208,814

Applicant(s)

RAO, R. PADMANABHA

Examiner

Son P. Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 60-62 and 65-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 60-62 and 65-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/28/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 60-62, 65-68 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-59, 63-64 have been canceled.

### ***Terminal Disclaimer***

2. The terminal disclaimer filed on 8/28/06 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent 5,940,738 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 60, 62 and 65-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yurt et al. (US 5,132,992) in view of Herz et al. (US 5,351,075).

Regarding claim 60, Yurt discloses a digital information distribution system (figure 2a) comprising:

a digital information stream server (figures 1g, 2a-2b, 6, col. 4, lines 19-63)

comprising:

means for storing a digital information stream of predetermined duration (interpreted as digital data such as movie stored in source library 111 or data library 118 – see include, but not limited to, figures 2a, 2b, col. 6, lines 8-34, col. 10, lines 32-65) ;

network adaptation means for transmitting digital information onto a first communication network on a predetermined channel (interpreted as transmission conversion 119 and transceiver 122 for transmitting digital information such as television program, data files, etc. to the communication network to reception apparatus – see include, but not limited to, figure 2b, col. 6, lines 10-34, col. 8, lines 32-45, col. 15, line 65-col. 16, line 15, col. 16, lines 53-68);

request receiving means for receiving requests for the digital information stream from the first communication network (interpreted as transceiver 122 or interface 121 that receives requests from user – figure 2b, col. 13, line 30-68, col. 15, lines 3-46) ;

scheduling means for directing the digital information stream to the network adaptation means for transmission over the first communication network on the predetermined channel at a predetermined time, if a request for the digital information

stream is received by the request receiving means (interpreted as system control computer 1123 comprises queue program manager for queuing all transmission requests for movies/program requested by users – col. 15, lines 20-68); and

opportunistic programming means for directing digital information to the network adaptation means for transmitting over the first communication (interpreted as means in library 11 or library 118 for providing digital information such as television program, data files, etc. to the transmission conversion 119 and transceiver 122 – figure 2b, col. 6, lines 10-34, col. 8, lines 32-56, col. 15, lines 33-68);

network interface coupled to first communication network for connecting the first communication network to a plurality of subscriber unit via a second communication network (interpreted as reception system comprises transceiver 201 and user/computer 207 coupled to transmission network between transmission and reception apparatuses for connecting the network between transmission and reception apparatuses to a plurality of units at user sites via network 200a, 200b, 200d – figures 1f, 1g, 2b, 6), the network interface comprising:

request receiving means for receiving request originating from subscriber unit (interpreted as user/computer interface that receives request from unit at user site – see include, but not limited to, figures 1f, 1g, 2b, 6);

request relay means for relaying requests from subscriber units for digital information stream to the digital information stream server (interpreted as user/computer interface 207/transceiver 201 for transmission requests for movie upstream to the transmission apparatus- see include, but not limited to , figures 2b, 6); and

means for relaying the digital information stream from the first communication network to the requesting ones of the subscribers unit via second communication network (interpreted as means for providing the requested movie to the unit at the user location that request the movie – see figures 1f, 1g, 6, col. 4, lines 20-63, col. 18, lines 10-45, col. 19, lines 18-36).

Yurt further discloses upon receives the request and a customer ID code, the system confirms whether the user is in good standing. If the user is in good standing, the system queues the use to input his request for later delivering the requested content to the customer (col. 14, lines 14-48). Thus, the requests are received from privileged subscriber unit and non-privileged subscriber unit is interpreted requests from units of user site with customer ID code entered by user in good standing/not good standing respectively. However, Yurt does not specifically disclose digital information is transmitted only if the digital information stream is not being transmitted, request relaying means for relaying only requests from privileged subscriber units for information stream to the information stream server.

Herz et al. teaches increasing prime time slot for transmission of most popular program(s) results in reducing non-prime time slot for other programs in a channel (col. 7, lines 13-68). Thus, other digital program is transmitted in a time slot of a channel only if most popular/requested program is not being transmitted in that time slot of the channel reads on digital information is transmitted only if the digital information stream is not being transmitted. Herz further discloses a network interface (video program scheduler (60) and video selection and transmission unit 30 – figure 1) coupled to the

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first communication network (communication network between video library and video selection and transmission unit 30 – figure 1) for connecting the first communication network to a plurality of subscriber units (TVs 40 and phone 50 – figure 1) via a second communication network (network communication between TV 40, phone 50 and video selection and transmission unit 30, video program scheduler 60 – figure 1) comprising:

request receiving means (either video program scheduler 60 or interface of video selection and transmission unit 30 that interfaces with video program scheduler 60) for receiving request originally for the subscriber units (figure 1); and

request relaying means (interface in video selection and transmission unit 30 that interface with video library 20 – see figure 1) for relaying programming requests from subscriber units for the digital information stream to the digital information stream server (relaying the programming request to video library for requested video – figure 1); and means (interfaces in video selection and transmission unit 30 with TVs 40 – figure 1) for relaying the digital information stream from the first communication network (network between video library 20 and video selection and transmission unit 30) to the requesting ones of the subscriber units via the second communication network (network between video selection and transmission unit 30 and TVs 40 – figure 1). Herz further discloses the prerecorded video program stored in the video library 20 are made available to members of the Home Video Club (hereinafter “viewers”) **who have paid their membership fee by selecting the desired video programs using video selection and transmission unit 30**. Video program scheduler 60 specifies to the video selection and transmission unit 30 which video programs are to be selected from the video library

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20 and at what times they are to be displayed (col. 3, lines 30-50; col. 4, line 68-col. 6, line 5, col. 7, lines 57-68). Since the video transmission selection and transmission unit send the request to video library (20) to retrieve the requested video and send to the viewers based on priority of the programming requests, it is obvious to one of ordinary skill in the art at the time the invention was made that the request relaying means (video selection and transmission unit interface with the video library) relaying only requests from privileged subscriber units for the digital information stream to the digital information stream server (only requests with higher priority are relayed to video library for requested video) so that only video with higher priority is selected and provided to the users at that time. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yurt to use the teaching as taught by Herz in order at least to raise revenue (see col. 8, lines 36-44; abstract).

Regarding claim 62, Yurt in view of Herz teaches a system as discussed in the rejection of claim 60. Yurt further discloses the communication network between transmission and reception apparatuses comprises satellite network, CATV network, ISDN network, etc. for transmitting digital content comprises television programs, movies, etc. – figure 2b. Thus, the network is inherently a hierarchical network.

Alternatively, Herz also discloses communication network between video library (20) and video selection and transmission unit 30) – figure 1. Inherently, this communication network is a hierarchical network.



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Regarding claim 65, Yurt in view of Herz teaches a system as discussed in the rejection of claim 60. Herz further opportunistic programming means transmits digital information via the channel only upon request of a subscriber unit when the digital information stream is not being transmitted (interpreted as device for transmission other digital program via a time slot in a channel only upon request of a unit at user site that request programs other than most popular/requested programs when the most popular/requested program is not being transmitted – col. 7, lines 13-68).

Regarding claim 66, Yurt in view of Herz discloses a system as discussed in the rejection of claim 60. Herz further discloses opportunistic program means transmits digital information via the channel whenever the digital information stream is not being transmitted (interpreted as device for transmission digital program other most popular program via a time slot in a channel is transmitted whenever most popular/requested program is not transmitted in that time slot (col. 7, lines 13-68)); or in alternative interpretation, the system dynamically adjusts schedule of most popular programs /other than most popular programs in the time slot of the channel – col. 3, lines 30-34).

Regarding claim 67, Yurt in view of Herz discloses a system as discussed in the rejection of claim 60. The additional limitation of the digital information transmitted by the opportunistic programming means comprising an alternative video program is either interpreted as another television program, (see Yurt, col. 6, lines 10-22), or program other than most popular/requested programs (col. 7, lines 13-68).

Regarding claim 68, Yurt in view of Herz discloses a system as discussed in the rejection of claim 60. The additional limitation of the digital information transmitted by the opportunistic programming means comprising an alternative video program is interpreted as files, program notes, etc. (see Yurt, col. 6, lines 10-54, col. 10, line 66, col. 13, lines 48-60).

4. Claim 61 is rejected under 103 as being unpatentable over Yurt et al. (US 5,132,992) in view of Herz et al. (US 5,351,075) as applied to claim 60 above, and further in view of Baker et al. (US 5,583,561).

Regarding claim 61, Yurt in view of Herz teaches a system as discussed in the rejection of claim 60. Herz further discloses scheduling means further comprises means for:

if a request for the digital information stream is received prior to a predetermined time, initiating transmission of the digital information stream starting at a beginning of the digital information stream over the predetermined channel at the predetermined time (interpreted as upon receiving the request and request is from a user in good standing, the request is queued as delivery time and delivery location and the requested program, requested movie is provided as requested time to the requested location – see include, but not limited to, col. 14, lines 14-63; col. 15, lines 3-22). However, neither Yurt nor Herz specifically disclose if the request for the digital information stream is received after the predetermined time, initiating transmission of the digital information stream at a

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point in the digital information stream determined relative to the predetermined time so that the digital information stream ends the predetermined duration after the predetermined time.

Baker discloses if the request for the digital information stream is received after the predetermined time, initiating transmission of the digital information stream at a point in the digital information stream determined relative to the predetermined time so that the digital information stream ends the predetermined duration after the predetermined time (interpreted as if the user request is received after start time of stream 1 on channel 1 (e.g., after  $T_0$ ), the request is grouped into the next stream at time  $T_1$  – figures 5-6B, col. 14, line 8-col. 15, line 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yurt in view of Herz with the teaching of Baker in order at least to lower the cost of service per viewer (col. 3, lines 45-62).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Youden et al. (US 5,815,146) discloses video on demand system with multiple data sources configured to provide VCR-like services.

Howe et al. (US 5,818,438) discloses system and method for providing television services.

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Arazi et al. (US 5,966,120) discloses method and apparatus for combining and distributing data with pre-formatted real time video.

Smoral et al. (US 5,608,448) discloses hybrid architecture for video on demand server.

Verbiest et al. (US 5,550,577) discloses video on demand network, including a central video server and distributed video servers with random access read/write memories.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P. Huynh whose telephone number is 571-272-7295. The examiner can normally be reached on 9:00 - 6:30.

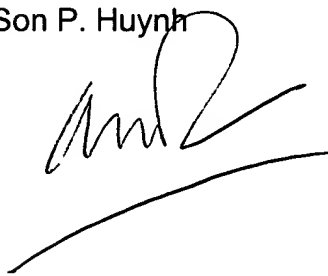
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Son P. Huynh

November 6, 2006

A handwritten signature in black ink, appearing to be 'Son P. Huynh', with a long horizontal flourish extending from the bottom of the signature.